



The top 10 risks in telecommunications 2019

An industry at an inflexion point ...

As the first wave of 5G implementations ramp up, the global telecoms industry is at an inflexion point — a defining moment characterized by profound shifts in external factors, industry challenges and organizational priorities.

Despite ongoing convergence with other sectors and the potential revenue uplift from 5G and internet of things (IoT), the industry remains stuck in a low-growth mode. While data services will continue to drive mobile revenue growth, their impact will be largely offset by continued declines in mobile voice services.

Also, while IoT connections are proliferating — and projected to reach 25 billion by 2025 — their top-line contribution is still relatively small, with revenue per connection remaining low and set to trend down further.

... and targeting agility and customer focus

To break free of these constraints on growth, telcos are applying an ever-wider array of emerging technologies with the aim of achieving step changes in agility, efficiency and customer centricity.

This drive is seeing digital transformation initiatives expand in scope and ambition across the sector — at the very moment when telcos are embarking on a new wave of infrastructure upgrades in both fixed and mobile. And share price performance continues to vary widely, with operators in emerging markets outperforming other regions over the past three years.

What does all this add up to for telcos? It will result in a complex, fast-changing mix of mounting capex burdens, shifting market structures and newly-emerging disruption scenarios. As if these challenges weren't enough, regulatory and policy challenges are also evolving at pace.

As these challenging conditions exist, the move to the digital society presents both risks and rewards for telcos. There's no doubt they can play a vital role as agents of change — but only if they build deeper engagement and trust with customers and other stakeholders.

Mapping out the industry's risks

It's against this background that we've conducted analysis of the telecoms risk universe for 2019. As in the previous years, we've combined insights from industry and consumer surveys with the evolving perspectives of sector practitioners to pinpoint the most critical risks facing the telcos today. As the "risk radar" below shows, we organize the sector's risk factors into four categories – compliance, operational, strategic and financial – and rank each risk on the basis of its importance and impact.



The top 10 risks for 2019

At a high level, risk analysis suggests that unless the telcos put customers at the front and center of their strategies, they'll struggle to succeed. Here are the 10 biggest risks we've identified across the sector.

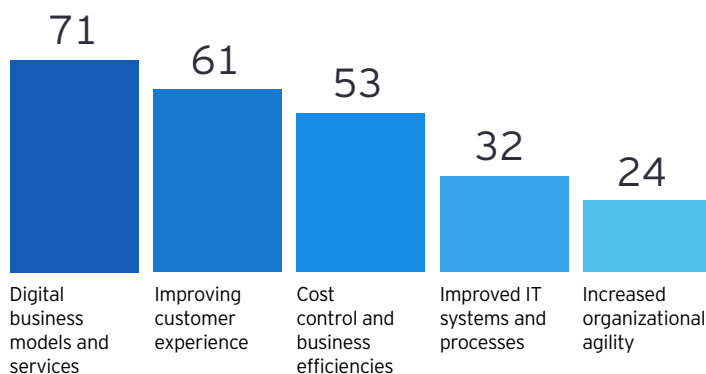
01

Ineffective digital growth and diversification strategy

Industry surveys confirm that digital services are the top priority for telco leaders. Yet generating growth from these services remains a challenge, with most of the early forays into adjacent markets, such as financial services, remaining small-scale and yielding mixed results. As 5G and the IoT move to center stage, telcos need to maximize their addressable market by developing innovative business models, and seizing opportunities for inorganic growth, service innovation and diversification through M&A and strategic alliances.

Telco leading strategic priorities

% of respondents



Source: *Digital transformation for 2020 and beyond*, EYGM Limited, 2017. (Survey of 39 global telecommunications industry leaders)

02

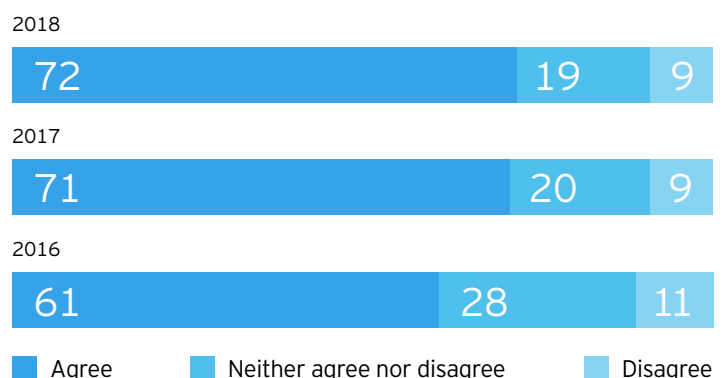
Underestimating changing imperatives in privacy, security and trust

Heightened by regulations such as the General Data Protection Regulation (GDPR), consumers' concerns about the use of their online data are continuing to increase – a trend evidenced by our consumer research. With digital trust now a white-hot issue for consumers and enterprises alike, and regulators prioritizing data protection, telcos face the growing challenge of ensuring that their customers' data and experiences are safe and secure.

While operators recognize this imperative, many could still do more to put security and trust at the heart of their customer interactions – including making "security by design" a cornerstone of their digital transformation strategies.

Consumer attitudes to online data disclosure

Statement: I am very cautious about disclosing personal and financial information on the internet, even if the website is from a brand that I know or trust.



Source: *Decoding the digital household*, EYGM Limited, 2018. (Based on a survey of 2,500 UK households)

03

Inability to scale internal digitization initiatives

In their push to transform the customer experience, generate new efficiencies and boost organizational agility, many operators are launching multiyear digital transformation programs. Yet our research shows these projects face significant barriers – not least are the burden of legacy IT platforms and a lack of digital skills.

New technology cycles can also slow progress, given the difficulty of harnessing emerging innovations within an existing enterprise-wide transformation. To do this successfully, operators must develop a holistic, joined-up view of emerging technologies, while ensuring they don't underestimate the continuing potential of more mature technologies, such as software-defined networking (SDN).

Telco views on emerging technologies

% of respondents

AI and robotic process automation

57%

Cloud computing and big data

35%

Distributed ledger technology

8%

Source: *Capital Confidence Barometer: 18th edition*, EYGM Limited, 2018.

04

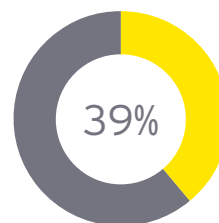
Failure to prioritize workforce planning and design

While operators recognize that a shortage of digital skills presents challenges in their organizations, the talent agenda is still starved of airtime as a strategic priority. Digital transformation programs tend to focus more on overhauling systems and processes than reshaping workforce capability – yet reskilling is imperative as technology cycles accelerate.

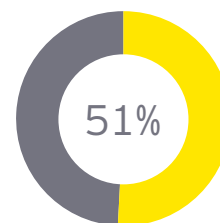
To overcome these issues, boost productivity and avoid new organizational silos, telcos must take a holistic approach to workforce design. Building employee engagement is especially vital, since this provides the foundation for a superior customer experience.

Telco attitudes to digital skills and talent

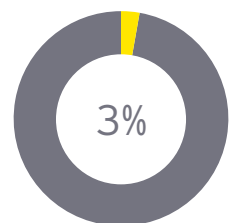
% of respondents



Operators that believe acquiring and developing talent is a top enabler of innovation



Operators that believe the lack of digital skills is a top transformation barrier



Operators that see growing and retaining talent as a top strategic priority

Source: *Digital transformation for 2020 and beyond*, EYGM Limited, 2017. (Survey of 39 global telecommunications industry leaders)

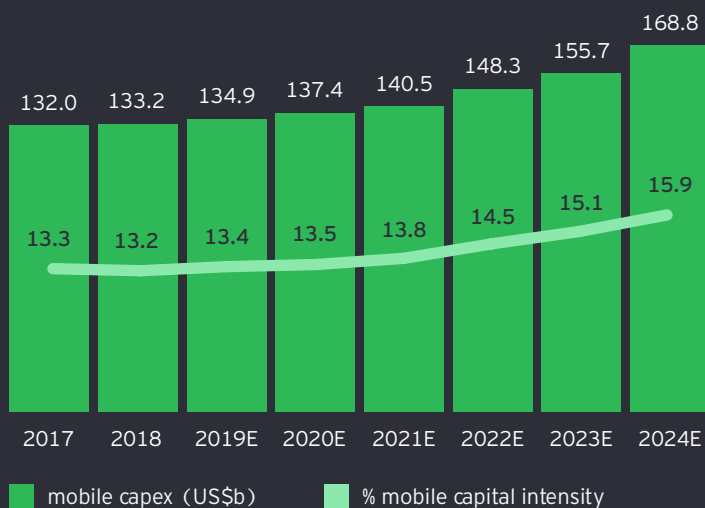
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Inability to combat the growing capex burden

Operators across the world are facing a new wave of network investment, ranging from 5G and low-power wide area networks to gigabit fiber. Yet the returns on this capex remain uncertain, with many IoT-centric 5G use cases still in their infancy, and the perception of broadband as a utility threatening the premium pricing of fiber connectivity.

As operators grapple with an ever more diverse portfolio of network assets, making the right choices around infrastructure switch-off, spin-off and sharing will become increasingly vital.

Global mobile capex development⁴



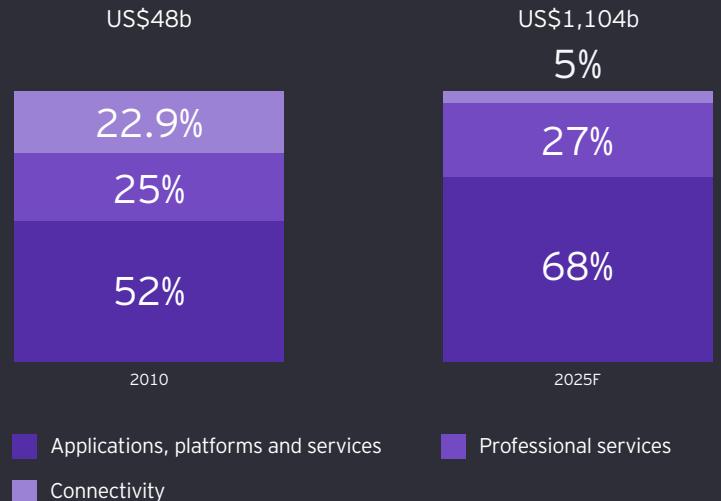
Source: *Telecoms capex: worldwide trends and forecasts 2017-2025*, Analysys Mason, March 2019.

06

Failure to navigate evolving disruption scenarios

Rising demand for intelligent connectivity is providing a wide range of powerful, well-funded disruptors with an entry point to the telecoms market. For example, new alternative network providers are competing with incumbents in “full-fiber” deployments, while mobile entrants are fighting hard on price. Now 5G is set to accelerate the shift in IoT revenues toward applications and services, while private networks for enterprise could challenge legacy value chains. As the move to 5G gains momentum, operators need to stay alert to potentially disruptive threats, and ensure that tackling them remains a top-of-mind priority.

Global IoT revenue mix forecast



Source: *Global Mobile Trends 2018*, GSMA, September 2018.

07

Inadequate portfolio management processes

Industry studies suggest that half of all operators fail to achieve the synergies initially targeted from their M&A deals, with inadequate integration planning and management processes often to blame. Yet inorganic growth remains vital as convergence and disruption accelerate. With revenue synergies proving particularly hard to capture, the top integration challenges revolve around talent and strategic growth priorities. As convergence sees the differences between buyers and sellers widen, more transformational M&A may increase the challenges of integration, demanding more flexible integration road maps and smarter management of telcos' business portfolios.

What were the achieved synergies compared with the value of synergies identified at the time of the deal?

Telco M&A: synergy realization

We achieved lower synergies than we identified



We achieved the synergies we identified



We achieved higher synergies than we identified



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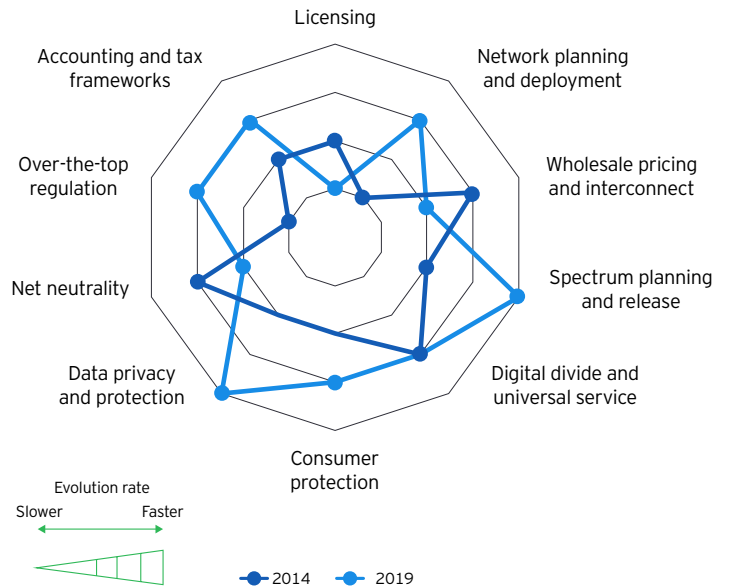
Source: *Capital Confidence Barometer: 19th edition*, EYGM Limited, 2018. (Telecommunications respondents)

08

Failure to adapt to changing regulatory frameworks

As regulators' focus continues to shift toward areas such as data protection, some traditional burdens on operators – such as wholesale pricing and interconnection – are easing. Yet other areas of regulation are evolving faster than ever, with spectrum release road maps, data protection frameworks and accounting rules all in flux. Telecoms is also increasingly finding itself at the heart of governments' industrial policies, creating new demands on operators. It's vital for them to map out, balance and navigate this changing landscape of national and international regulation and policy.

Regulatory domains impacting telcos



Source: EY analysis.

09

Insufficient engagement with industry verticals and public sector

Governments worldwide now see fiber and 5G as instrumental in driving the move to a digital society. And telecoms is increasingly viewed as an enabler of digital transformation among private sector enterprises across many vertical industries. These factors point to a need for telcos to engage proactively with both the public sector and different industries – but to date the level of engagement has remained limited. By actively articulating new value propositions to enterprises and government at all levels, telcos will position themselves to lead the emergence of new ecosystems and play their full role in transforming industries and society.

10

Failure to integrate multiple routes to innovation

In recent decades, operators have outsourced much of their R&D. And operators' R&D as a proportion is small relative to other industries, underlining how much innovation leadership is now in the hands of other players in the value chain. More recently, operators have taken steps to widen their sources of innovation, by launching new venture capital funds and incubator initiatives. Going forward, integrating a range of innovation activities, from traditional R&D to start-up funding and strategic alliances, will enable operators to make the most of new technology cycles. Stronger feedback loops into the main organization will also ensure that wider access to innovation translates into greater business impact.

How EY can help

The telecoms sector is at the heart of the digital disruption and convergence agenda. Given this positioning, the key question is: are you embracing the right opportunities — and focusing on the right risks?

EY teams can help you find the answer, and prioritize your digital transformation needs across:

- ▶ Customer experience design
- ▶ Service diversification
- ▶ IoT
- ▶ Intelligent automation
- ▶ Renewal of legacy systems and processes

In all these areas and more, EY teams can help you develop the right long-term strategy, helping you to make the most of the opportunities that digital disruption brings.



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